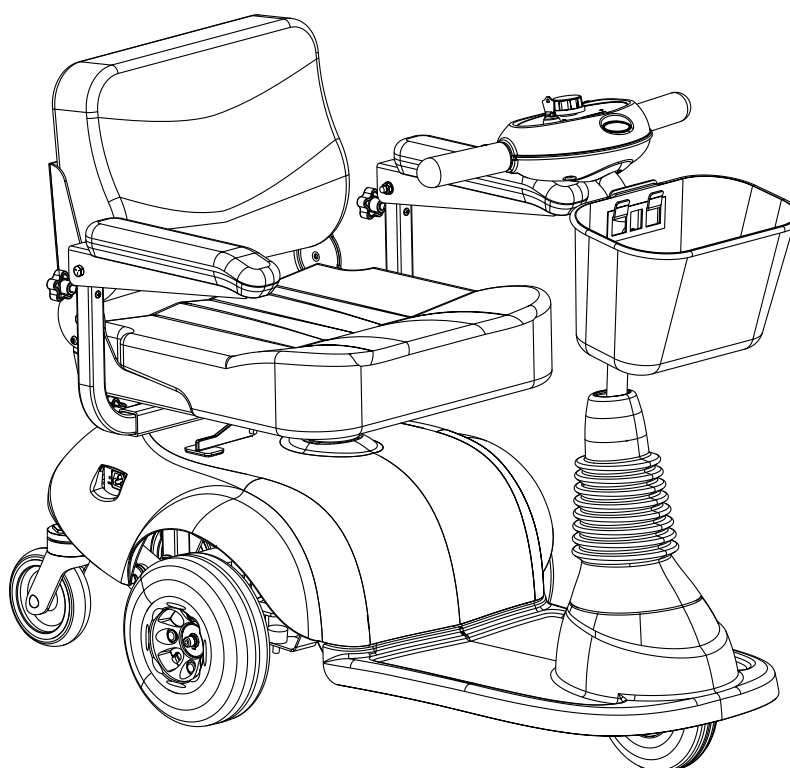


Owner's Operator And Maintenance Manual



DEALER: THIS MANUAL MUST BE GIVEN TO THE USER OF THE SCOOTER.

USER: BEFORE USING THIS SCOOTER, READ THIS MANUAL AND SAVE FOR FUTURE REFERENCE.

For more information regarding
Invacare products, parts, and services,
please visit: www.invacare.com



Yes, you can.™

WARNING

DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS AND INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DEALER OR TECHNICAL PERSONNEL IF APPLICABLE BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE, INJURY OR DAMAGE MAY RESULT.

SECTIONS OTHER THAN THOSE DESCRIBED IN THIS MANUAL MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

SPECIAL NOTES

WARNING/CAUTION notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

WARNING

As a manufacturer of powered scooters, Invacare endeavors to supply a wide variety of powered scooters to meet the many needs of the user. However, final selection of the type of powered scooter to be used by an individual rests solely with the user and his/her healthcare professional capable of making such a selection.

TIE-DOWN RESTRAINTS AND SEAT POSITIONING STRAPS

Invacare recommends that powered scooter users NOT be transported in vehicles of any kind while in a powered scooter. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a powered scooter, in a moving vehicle of any type.

It is the position of Invacare that users of powered scooters should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any powered scooter transportation systems.

WITH REGARDS TO RESTRAINTS - SEAT POSITIONING STRAP - IT IS THE OBLIGATION OF THE DME DEALER, THERAPISTS AND OTHER HEALTHCARE PROFESSIONALS TO DETERMINE IF A SEAT POSITIONING STRAP IS REQUIRED TO ENSURE THE SAFE OPERATION OF THIS EQUIPMENT BY THE USER. SERIOUS INJURY CAN OCCUR IN THE EVENT OF A FALL FROM A POWERED SCOOTER.

Table of Contents

SPECIAL NOTES	2
PRODUCT REGISTRATION FORM	2
SPECIFICATIONS	7
SECTION 1 - GENERAL GUIDELINES	8
OPERATING GUIDELINES	8
RAMPS	10
ELECTRICAL	10
GROUNDING INSTRUCTIONS	10
BATTERIES	10
RAIN TEST	10
WEIGHT LIMITATION	11
ELECTROMAGNETIC INTERFERENCE	11
SAFETY/HANDLING	13
WARNING/CAUTION LABEL LOCATION	15
SECTION 2 - SAFETY INSPECTION/MAINTENANCE	16
SAFETY INSPECTION CHECKLIST	16
MAINTENANCE	17
TROUBLESHOOTING	19
SECTION 3 - OPERATION	20
CONTROL PANEL FEATURES	20
OPERATION OF THE SCOOTER	23
BRAKE RELEASE LEVER	24
REPLACING THE RESET CIRCUIT BREAKER/FUSE	25
SECTION 4 - SEAT ASSEMBLY	27
REMOVING/INSTALLING THE SEAT	27
ADJUSTING SEAT HEIGHT	28
REMOVING/INSTALLING THE SEAT POST	28
ADJUSTING THE SEAT DEPTH	29
90° SEAT SWIVEL ADJUSTMENT	30
REMOVING/INSTALLING SEAT POSITIONING STRAP	30
SECTION 5 - ARMS	31
REMOVING/INSTALLING/ADJUSTING THE ARMRESTS	31
SECTION 6 - TILLER ADJUSTMENT	33
TILLER ANGLE ADJUSTMENT	33
SECTION 7 - SHROUD/WHEELS	34
REMOVING/INSTALLING THE REAR SHROUD	34
REPLACING FOAM FILLED TIRES ONTO WHEEL RIMS	34
REMOVING/INSTALLING THE DRIVE WHEELS	35
REMOVING/INSTALLING THE FRONT WHEEL	36
REMOVING/INSTALLING THE CASTER ASSEMBLIES	36

Table of Contents

TABLE OF CONTENTS

SECTION 8 - BATTERIES	37
RECOMMENDED BATTERY TYPE	38
REPLACING THE BATTERIES	38
CHARGING THE BATTERIES.....	41
SECTION 9 - TRANSPORTING	43
TRANSPORTING THE SCOOTER.....	43
SECTION 10 - OPTIONS	45
REMOVING/INSTALLING THE FRONT BASKET	45
INSTALLING/REMOVING THE CRUTCH/CANE HOLDER	46
INSTALLING/REMOVING THE SAFETY FLAG	46
INSTALLING/REMOVING/USING THE WALKER HOLDER	47
INSTALLING/REMOVING THE REAR MOUNTED BASKET	48
LIMITED WARRANTY	51

REGISTER YOUR PRODUCT!

The benefits of registering:

1. Safeguard your investment.
2. Ensure long term maintenance and servicing of your purchase.
3. Receive updates with product information, maintenance tips, and industry news.
4. Invacare can contact you or your provider, if servicing is needed on your product.
5. It will enable Invacare to improve product designs based on your input and needs.

Register ONLINE at www.invacare.com

- or -

Complete and mail the form on the next page

Any registration information you submit will be used by Invacare Corporation only, and protected as required by applicable laws and regulations.



PRODUCT REGISTRATION FORM

Register **ONLINE** at www.invacare.com - or -
Complete and mail this form

Name _____

Address _____

City _____ State/Province _____

Zip/Postal Code _____

Email _____ Phone No. _____

Fold
here

Invacare Model No. _____ Serial No. _____

Purchased From _____

1. Method of purchase: (check all that apply)

Medicare Insurance Medicaid Other _____

2. This product was purchased for use by: (check one)

Self Parent Spouse Other _____

3. Product was purchased for use at:

Home Facility Other _____

4. I purchased an Invacare product because:

Price Features (list features) _____

5. Who referred you to Invacare products? (check all that apply)

Doctor Therapist Friend Relative Other _____

No referral Advertisement (circle one): TV, Radio, Magazine, Newspaper

6. What additional features, if any, would you like to see on this product?

Fold
here

7. Would you like information sent to you about Invacare products that may be available for a particular medical condition? Yes No

If yes, please list any condition(s) here and we will send you information by email and/or mail about any available Invacare products that may help treat, care for or manage such condition(s):

8. Would you like to receive updated information via email or regular mail about the Invacare home medical products sold by Invacare's dealers? Yes No

9. What would you like to see on the Invacare website?

10. Would you like to be part of future online surveys for Invacare products? Yes No

11. User's Year of birth: _____

If at any time you wish not to receive future mailings from us, please contact us at Invacare Corporation, CRM Department, 39400 Taylor Parkway, Elyria, OH 44035, or fax to 877-619-7996 and we will remove you from our mailing list.

Detach here

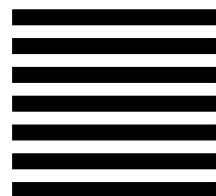
Fold
here



BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 196 ELYRIA OH

POSTAGE WILL BE PAID BY ADDRESSEE

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



INVACARE CORPORATION
CRM DEPARTMENT
39400 TAYLOR PARKWAY
ELYRIA OH 44035-9836



Fold
here

Invacare Product Registration Form

Detach here

Please Seal with
Tape Before Mailing

SPECIFICATIONS

<p>Overall Dimensions Length: 44-inches (111.76 cm) Width: 22.5-inches (57.15 cm) Step Height (From Floor Pan to Ground): 3.5-inches (8.89 cm) Seat Height (From Floor Pan to Seat): 17-inches (43.18 cm) 18-inches (45.72 cm) 19-inches (48.26 cm)</p>	
<p>Seat Dimensions Width: 17-inches (43.18 cm) 19-inches (48.26 cm) Depth: 16-inches (40.64 cm) 18-inches (45.72 cm) Back Height: 15-inches (38.10 cm) 17-inches (43.18 cm) Seat Cushion Thickness: 3-inches (7.62 cm) Back Cushion Thickness: 2.5-inches (6.35 cm)</p>	
<p>Arm Dimensions Length: 13-inches (33.02 cm) Height between Seat and Arms: 7-9-inches (17.78-22.86 cm) Width between Arms: 17-inches (43.18 cm) 19-inches (48.26 cm)</p>	
<p>Speed Range: 0 - 4.5 mph (0 - 7.2 kmph)</p>	
<p>Max. Weight Limitation: 300 lbs (136 kg)</p>	
<p>Max. Incline Capability: 8° grade</p>	
<p>Wheel Size Front: 2 x 7-inches (5.08 x 17.78 cm) Drive: 3 x 8-inches (7.62 x 20.32 cm) Rear Caster: 1 x 5-inches (2.54 x 12.7 cm)</p>	
<p>Turning Radius: 29-inches (76.20 cm)</p>	
<p>Weight of Product Base Section: 71 lbs (32.27 kg) Seat (with arms): 31 lbs (14.09 kg) Batteries: 18 lbs (8.18 kg)</p>	
<p>Total Weight of Product with Batteries: 120 lbs (54.54 kg) without Batteries: 102 lbs (46.36 kg)</p>	

--

WARNINGS

Performance adjustments should **ONLY** be made by professionals of the healthcare field or persons fully conversant with this process and the driver's capabilities. Incorrect settings could cause injury to the driver, bystanders, and/or damage to the powered scooter and surrounding property.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional **BEFORE** attempting active use of the powered scooter.

For individuals with balance problems, practice transferring activities **WITH AN ASSISTANT** in the presence of a qualified healthcare professional.

DO NOT attempt to transfer into or out of the powered scooter without assistance.

BEFORE use, verify that the motor is plugged into the harness.

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

DO NOT lean over the top of the back upholstery to reach objects from behind as this may cause the powered scooter to tip over.

DO NOT shift your weight or sitting position toward the direction you are reaching as the powered scooter may tip over.

DO NOT use an escalator to move a powered scooter between floors. Serious bodily injury may occur.

DO NOT operate scooter on roads, streets or highways.

Avoid operating scooter in dark or poorly lit areas.

DO NOT attempt to move up or down an incline with a water, ice or oil film.

DO NOT attempt to ride over curbs or obstacles. Doing so may cause your powered scooter to turn over and cause bodily harm and/or damage to the powered scooter.

DO NOT make sharp turns in forward or reverse at excessive speed. Failure to observe the warning can cause the scooter to tip over and may result in injury to user and/or damage to the product.

WARNINGS (CONTINUED)

DO NOT attempt to lift the powered scooter by its tiller, seat or shrouds.

DO NOT attempt to lift the powered scooter by lifting on any removable (detachable) parts. Lifting by means of any removable (detachable) parts of a powered scooter may result in injury to the user or damage to the powered scooter.

DO NOT operate the powered scooter until you have checked that the surroundings are clear and that the area is safe for travel.

DO NOT use parts, accessories, or adapters other than those authorized by Invacare. Otherwise, the warranty is void.

Before attempting to sit in or exit the powered scooter, **REMOVE** the key from the ignition. This will ensure that the power is off and the powered scooter will not drive.

DO NOT remove key or shut off while the scooter is in motion.

Remove the key from the ignition while the scooter is not in use. Otherwise, injury and/or damage to the scooter and surrounding property may occur.

DO NOT connect any medical device, i.e., a ventilator, life support machine, etc. to the battery. This could cause unexpected failure of the device and the powered scooter.

Invacare specifically disclaims responsibility to all personal injury and property damage that may occur during use which does not comply with applicable federal, state and local laws and ordinances.

The rear shroud is designed to cover the batteries/controller/harness/motor connections and the transaxle. **ONLY REMOVE** the rear shroud to: 1) Manually disconnect/connect cable connections and 2) Remove/install batteries.

DO NOT stand on the shroud(s) of the powered scooter.

Ensure seat is properly locked before attempting transfer into or out of the powered scooter. Attempting unsafe transfers may cause a fall from the powered scooter resulting in bodily injury.

Ensure that seat is locked into the **FORWARD** position **BEFORE** and **DURING** operation of the scooter. Otherwise, injury to the user and/or damage to the scooter may result.

DO NOT adjust the seat position outside the specifications recommended by the manufacturer.

Ensure that the tiller is properly adjusted before driving the scooter.

After making **ANY** tiller angle adjustments and **BEFORE** use, the tiller **MUST** be securely locked into position. A fall from the scooter could occur causing bodily injury and/or damage to the scooter. Gently, push/pull against tiller to ensure that the tiller is securely engaged.

Avoid storing or using the scooter near external flame or combustible products.

WARNING

DO NOT climb, go up or down ramps or traverse slopes greater than 8°. When negotiating ramps, if the throttle control lever is released while in **FORWARD** motion the powered scooter will "**ROLLBACK**" approximately one (1) foot before brake engages. If the throttle control lever is released while in **REVERSE** motion the powered scooter will "**ROLLBACK**" approximately three (3) feet before brake engages.

WARNING

Check to ensure that all electrical connections are secure at all times.

WARNING

DO NOT, under any circumstances, cut or remove the round grounding prong from any plug. Some devices are equipped with three-prong (grounding) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two-prong receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code. If you must use an extension cord, use **ONLY** a three-wire extension cord having the same or higher electrical rating as the device being connected.

WARNING

The warranty and performance specifications contained in this manual are based on the use of deep cycle gel cell or sealed lead acid batteries. Invacare strongly recommends their use as the power source for this unit. Carefully read battery/battery charger information prior to installing, servicing or operating your wheelchair.

WARNING

Invacare has tested its powered scooter in accordance with ISO 7176 "Rain Test". Passage of this test provides that the end user or his/her attendant should have sufficient time to remove his/her powered scooter from a rain storm and retain operation.

DO NOT leave your powered scooter in a rain storm of any kind.

DO NOT use your powered scooter in a shower.

DO NOT leave your powered scooter in a damp area for any length of time.

Direct exposure to rain or dampness could cause the powered scooter to malfunction electrically and mechanically and may cause the powered scooter to prematurely rust.

WARNING

The weight limitation for the Invacare Buzz is 300 lbs.

If so equipped, the front basket is rated for a maximum loading capacity of 10 lbs.

EMI WARNINGS

CAUTION: IT IS VERY IMPORTANT THAT YOU READ THIS INFORMATION REGARDING THE POSSIBLE EFFECTS OF ELECTROMAGNETIC INTERFERENCE ON YOUR POWERED SCOOTER.

ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES

Powered scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios, and cellular phones. The interference (from radio wave sources) can cause the powered scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to a certain intensity. This is called its "immunity level". The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed, your risk to EMI will be minimized.

The sources of radiated EMI can be broadly classified into three types:

- 1) **Hand-held Portable transceivers (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie," security, fire, and police transceivers, cellular telephones, and other personal communication devices. NOTE: Some cellular telephones and similar devices transmit signals while they are ON, even when not being used;**
- 2) **Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle; and**
- 3) **Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.**

NOTE: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered scooter.

EMI WARNINGS (CONTINUED)**POWERED SCOOTER ELECTROMAGNETIC INTERFERENCE (EMI)**

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the powered scooter's control system while using these devices. This can affect powered scooter movement and braking. Therefore, the warnings listed are recommended to prevent possible interference with the control system of the powered scooter.

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered scooters. Following the warnings listed should reduce the chance of unintended brake release or powered scooter movement which could result in serious injury.

- 1) Do not operate hand-held transceivers (transmitters receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the powered scooter is turned ON;
- 2) Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- 3) If unintended movement or brake release occurs, turn the powered scooter OFF as soon as it is safe;
- 4) Be aware that adding accessories or components, or modifying the powered scooter, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered scooter); and
- 5) Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a source of EMI nearby.

IMPORTANT INFORMATION

- 1) 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994) (the higher the level, the greater the protection).
- 2) While this product as shipped has been tested and is immune to signal levels up to 20V/m, the maximum immunity level of the product is unknown.

“Safety and Handling” of the powered scooter requires the close attention of the user. This manual points out the most common procedures and techniques involved in the safe operation and maintenance. It is important to practice and master these safe techniques until you are comfortable in maneuvering the powered scooter.

Use this information only as a “basic” guide. The techniques that are discussed have been used successfully by many.

Individual users often develop skills to deal with daily living activities that may differ from those described in this manual. Invacare recognizes and encourages each individual to try what works best for him/her in overcoming obstacles that they may encounter; however, ALL WARNINGS and CAUTIONS given in this manual MUST be followed. Techniques in this manual are a starting point for the new powered scooter user with “safety” as the most important consideration for all.

STABILITY AND BALANCE

WARNING

ALWAYS wear your seat positioning strap. Inasmuch as the SEAT POSITIONING STRAP is an option on this powered scooter (you may order with or without the Seat Positioning Strap), Invacare strongly recommends ordering the Seat Positioning Strap as an additional safeguard for the powered scooter user.

To assure stability and proper operation of your powered scooter, you must, at all times, maintain proper balance. Your powered scooter has been designed to remain upright and stable during normal daily activities.

PERCENTAGE OF WEIGHT DISTRIBUTION

WARNING

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

Many activities require the powered scooter owner to reach, bend and transfer in and out of the powered scooter. These movements cause a change to the normal balance, the center of gravity, and the weight distribution of the powered scooter. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional BEFORE attempting active use of the powered scooter.

Proper positioning is essential for your safety.

STAIRWAYS

WARNING

DO NOT attempt to move an occupied powered scooter between floors using a stairway. Use an elevator to move an occupied powered scooter between floors.

If moving a powered scooter between floors by means of a stairway, the occupant **MUST** be removed and transported independently of the powered scooter. Extreme caution is advised when it is necessary to move an **UNOCCUPIED** powered scooter up or down the stairs. Invacare recommends disassembling the scooter and transporting the components (five (5) components) independently up or down the stairs. Use **ONLY** secure, non-detachable parts on each component for hand-hold supports.

DO NOT attempt to lift a powered scooter by any removable (detachable) parts. Lifting by means of removable (detachable) parts may result in injury to the user or assistants or damage to the powered scooter.

ESCALATORS

WARNING

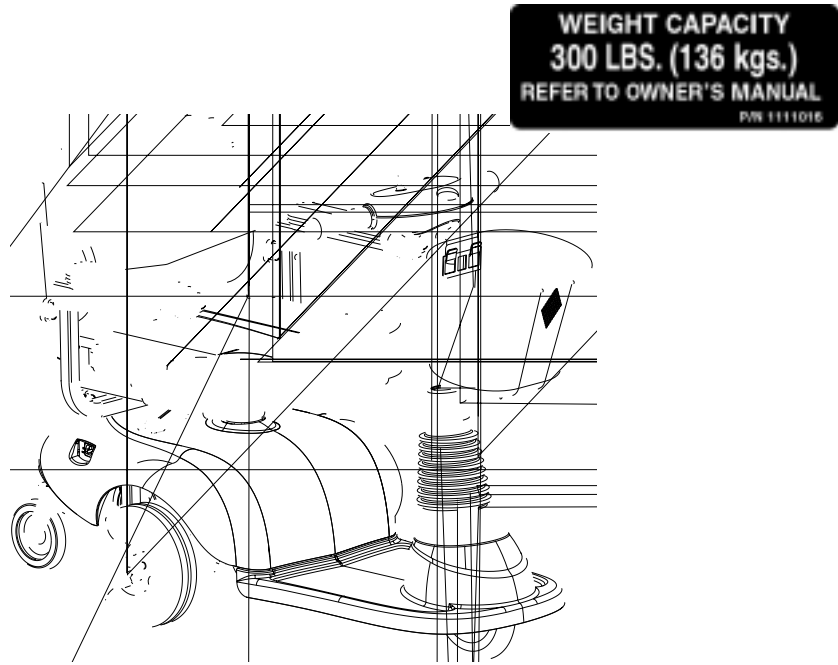
DO NOT use an escalator to move a powered scooter between floors. Serious bodily injury may occur.

Powered scooter without the batteries can weigh between 90 to 200 lbs. (depending on the model). Use proper lifting techniques (lift with your legs) to avoid injury.

Follow this procedure for moving the powered scooter between floors when an elevator is NOT available:

1. Remove the occupant from the powered scooter.
2. Disassemble the scooter. Refer to TRANSPORTING in SECTION 9 of this manual.
3. Carefully move the powered scooter components up or down the stairway.
4. Once all the components of the scooter are transported to the desired location reassemble the scooter. Refer to TRANSPORTING in SECTION 9 of this manual.

WARNING/CAUTION LABEL LOCATION



NOTE: Warning Label Number 1118359 is located under the rear shroud.



NOTE: Warning Label Number 1079203 is located under the shroud.

NOTE: Warning Label Number 1079203, located on the opposite side, is not shown.

SAFETY INSPECTION/
MAINTENANCE

NOTE: Every six (6) months take the scooter to a qualified technician for a thorough inspection and servicing. Regular cleaning will reveal loose or worn parts and enhance the smooth operation of the scooter. To operate properly and safely, the scooter must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of the scooter.

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

Scooter drives straight Check frame for damage and corrosion.				
Does not bind or interfere with travel. Brake easy to disengage/engage.				
No excessive side movement or binding when raised and turned.				
Inspect wheel/fork assembly for proper tension by spinning wheel, wheel should come to a gradual stop. Check front fork for damage and corrosion. Loosen/tighten locknut if wheel wobbles noticeably or binds to a stop. Ensure that fork stem bearing set is tight. Wheel bearings are clean and free of moisture.				
Ensure that tiller adjustment handle engages and disengages properly and securely. Scooter stops completely when throttle is released				
Inspect seat swivel for release and engagement (seat locks into the determined swivel positions). Inspect for rips, tears in upholstery.				

Inspect for flat spots and wear.				
Bolts are tight. Ensure all fasteners are secure. Inspect caster assembly for proper tension by spinning caster assembly; caster assembly should come to a gradual stop.				
Clean upholstery and armrests. Clean molded body shrouds.				

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may occur.

CAUTION

DO NOT overtighten hardware attaching to the frame. This could cause damage to the frame.

When storing scooter for prolonged periods of time, remove batteries. Refer to REPLACING THE BATTERIES in SECTION 8 of this manual. After reinstallation, always recharge batteries before use. Refer to CHARGING THE BATTERIES in SECTION 8 of this manual.

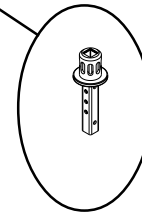
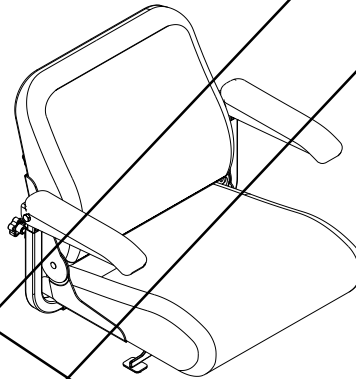
Use care in storage. DO NOT allow any metallic objects to contact the exposed terminals.

SUGGESTED MAINTENANCE PROCEDURES

1. Before using the powered scooter, make sure all nuts and bolts are tight. Check any parts for damage or wear and replace. Check all parts for proper adjustment.
2. Ensure that batteries are properly maintained and charged as required (SECTION 8).
3. Inspect brake for proper operation (SECTION 3).

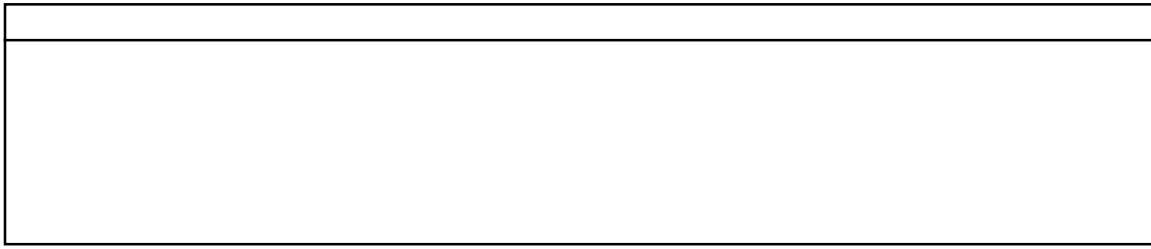
LUBRICATION POINTS (FIGURE 1)

1. Every six (6) months lubricate the top of the seat post using a Teflon[®] lubricant (FIGURE 1).



TROUBLESHOOTING

	<p>Batteries not charged long enough.</p> <p>Batteries weak, won't hold charge.</p>	<p>Charge batteries overnight or ensure eight (8) hours of charge between use times (SECTION 8).</p> <p>Replace Batteries (SECTION 8).</p>
	<p>Charger not working.</p> <p>Battery Connections loose.</p> <p>NO current at wall outlet.</p> <p>BAD connection on Charger, Charger Cable, Plug or Internal Wiring problem.</p>	<p>Replace Charger.</p> <p>Check all connections. Secure connections (SECTION 8).</p> <p>Switch to another wall outlet.</p> <p>Replace Charger or internal repairs required. Contact dealer or a qualified technician.</p>
	<p>Battery Failure.</p>	<p>Replace Batteries (SECTION 8).</p>
	<p>Have charger checked.</p> <p>Weak batteries.</p>	<p>Service or replace charger. Contact dealer or a qualified technician.</p> <p>Replace batteries (SECTION 8).</p>
	<p>Brake-Release Lever disengaged.</p> <p>Batteries require charging.</p> <p>Key not fully plugged in.</p> <p>Charger plugged in.</p> <p>Circuit breaker tripped.</p> <p>Soft stop is engaged. If key is turned "OFF" while driving, the scooter holds power for 1.5 seconds slowly decelerating unit to a stop.</p>	<p>Engage brake-release lever. (SECTION 3)</p> <p>Charge batteries (SECTION 8).</p> <p>Ensure key is inserted fully into keyswitch.</p> <p>Unplug charger from scooter.</p> <p>Reset breaker. If breaker trips again, it may indicate need for internal repairs. Contact dealer or a qualified technician.</p> <p>With key in the "OFF" position, wait 30 seconds and turn key to "ON" position.</p>



WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely. Otherwise, injury or damage may result.

1. **SPEED CONTROL KNOB** - Located on the top face of the control panel. The Turtle icon (🐢) represents the slowest speed and the Rabbit icon (🐰) represents the fastest speed as shown in FIGURE 1.
2. **BATTERY CHARGE-INDICATOR (BCI)** - The BCI is located on the top face of the control panel as shown in FIGURE 1. The BCI is composed of eight (8) LED's - three (3) green, three (3) yellow and two (2) red. It provides information on the remaining battery charge. At full charge all eight (8) LED's will be lit. As the batteries becomes discharged, the number of LED's will decrease from green to yellow then red. At this level, the user should charge the batteries as soon as possible. See chart below.

All	Fully Charged
Yellow and Red	Partially Charged
Red	Partially Discharged (Charge batteries as soon as possible. Refer to CHARGING THE BATTERIES in SECTION 8 of this manual.)
None	Fully Discharged

NOTE: The number of LED's bars may decrease when driving over uneven surfaces even with batteries fully charged. To see an accurate true reading, insert the key and turn to the ON position while the powered scooter is stationary.

WARNING

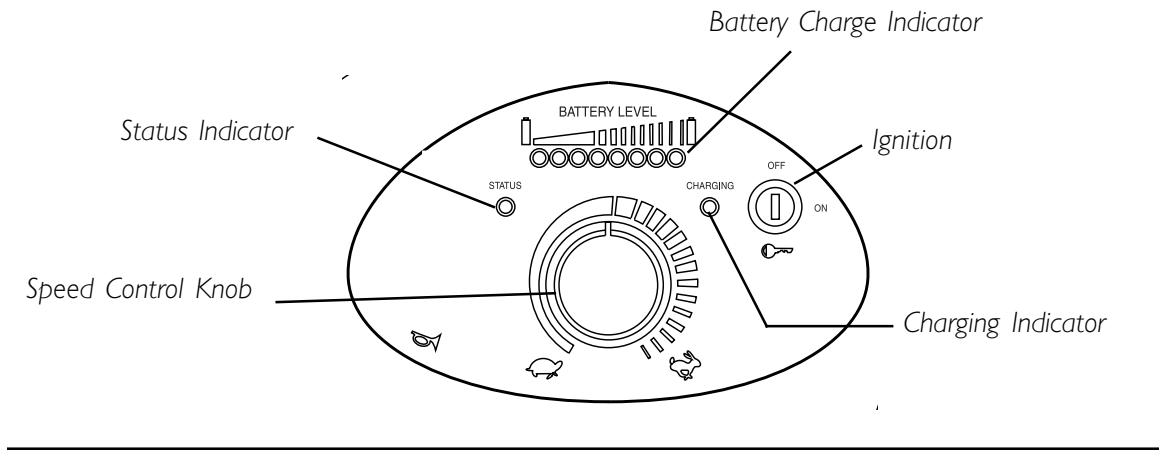
When negotiating ramps, if the throttle control lever is released while in FORWARD motion the powered scooter will "ROLLBACK" approximately one (1) foot before brake engages. If the throttle control lever is released while in REVERSE motion the powered scooter will "ROLLBACK" approximately three (3) feet before brake engages.

3. STATUS INDICATOR - Located on the top face of the control panel as shown in DETAIL "A" of FIGURE I. Status LED will flash in bursts, separated by a pause to provide diagnostic information. See chart below.

1	Battery needs recharging	Will drive	Battery charge is running low. Recharge the batteries as soon as possible.
2	Battery voltage too low	Drive inhibited	Battery charge is empty. Recharge the batteries. If the scooter is left off for a few minutes, battery charge may recover sufficiently to allow driving for a short period of time.
3	Battery voltage too high	Drive inhibited	Battery charge is too high. Scooter will charge the batteries when travelling down slopes or decelerating. Excessive charging in this manner may cause this fault. Turn the scooter power off and then back on again.
4	Current Limit time-out	Drive inhibited	The scooter has drawn too much current for too long, possibly because the motor has been over-worked, jammed or stalled. Turn the scooter power off, leave for a few minutes, and then turn the power back on again. The controller has detected a shorted motor. Check the wiring harness for shorts and check the motor. Contact dealer or a qualified technician.
5	Brake fault	Drive inhibited	Check that the park brake release lever is in the engaged position. The park brake coil or wiring is faulty. Check the park brake and wiring for open or short circuits. Contact dealer or a qualified technician.
6	Out of Neutral At Power Up	Drive inhibited	Throttle is not in neutral position when turning key switch on. Return throttle to neutral, turn power off, and back on again. Throttle may need to be re-calibrated. Check throttle wiring. Contact dealer or a qualified technician.
7	Speed Pot error	Drive inhibited	The throttle or its wiring is faulty. Check for open or short circuits. Throttle may not be correctly set up. Contact dealer or a qualified technician.
8	Motor volts error	Drive inhibited	The motor or its wiring is faulty. Check for open or short circuits. Contact dealer or a qualified technician.
9	Other internal errors	Drive inhibited	Contact dealer or a qualified technician.

OPERATION

4. CHARGING INDICATOR - Located on the top face of the control panel as shown in FIGURE I. SOLID RED indicates the charger is on (plunged into wall receptacle).
5. IGNITION - Located on right side of the control panel.
6. HORN BUTTON - Located on the front face of the control panel toward the left as shown in DETAIL "A" of FIGURE I.
7. THROTTLE CONTROL LEVER - Located below control panel as shown in DETAIL "A" of FIGURE I.



DETAIL "A"

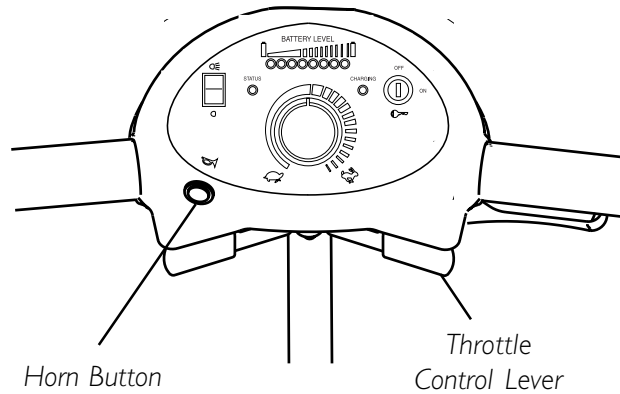


FIGURE I - CONTROL PANEL FEATURES

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise injury or damage may result.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional BEFORE attempting active use of the powered scooter.

Ensure seat is properly locked before attempting transfer into or out of the powered scooter. Attempting unsafe transfers may cause a fall from the powered scooter resulting in bodily injury.

For individuals with balance problems, practice transferring activities WITH AN ASSISTANT in the presence of a qualified healthcare professional. DO NOT attempt to transfer into or out of the powered scooter without assistance.

1. Before operation of the powered scooter, review CONTROL PANEL FEATURES in this section of the manual.
2. Install and charge batteries. Refer to REPLACING THE BATTERIES and CHARGING THE BATTERIES in SECTION 8 in this manual.
3. Transferring to and from the seat can be accomplished in one (1) of two (2) ways:
 - A. Flipping up the armrest makes entering/exiting easier.
 - B. Rotate seat to the direction of transfer. Refer to 90° SEAT SWIVEL ADJUSTMENT in SECTION 4 in this manual.
4. Once the seat is locked in the forward-facing position and both armrests are in the DOWN position, adjust the tiller to a comfortable angle. Refer to TILLER ANGLE ADJUSTMENT in SECTION 6 in this manual.
5. Adjust speed control knob to the appropriate setting.

NOTE: For driving indoors or on uneven terrain, a slower speed is recommended. For soft terrain or steep inclines (no greater than 8°), a faster speed may be necessary.

6. Insert the key into the ignition and turn it to the ON position.

WARNING

ALWAYS depress the throttle control lever gradually. This will ensure smooth safe starts.

NOTE: Throttle control levers are teetered such that moving one (1) will also move the opposite side throttle control lever.

7. To operate the scooter, depress the throttle control lever in the following manner:

- **TO MOVE FORWARD** - Push the **RIGHT-SIDE** throttle control lever forward (away from user) or pull the **LEFT-SIDE** throttle control lever rearward (toward user).
- **TO MOVE IN REVERSE** - Push the **LEFT-SIDE** throttle control lever forward (away from user) or pull the **RIGHT-SIDE** throttle control lever rearward (toward user).
- **TO STOP** - Release the throttle control lever and the powered scooter will quickly slow down and the brake will engage.

NOTE: To equip the scooter for left hand operation, contact a qualified technician.

The powered scooter is equipped with a "proportional" control meaning that the farther you depress the throttle control lever, the faster the powered scooter will travel. With a proportional control, you can drive as slowly in the high speed setting as you can in the low speed setting. Your top speed, however, is limited by the setting of the speed-control knob. For safety reasons, reverse speed is limited to approximately 50% of forward speed.

When first learning to drive, adjust speed control knob for a **SLOW** speed and try to drive the powered scooter **AS SLOWLY** as possible by depressing the throttle control lever only slightly. This exercise will help you learn to utilize the full potential of the proportional control and allow you to start and stop smoothly.

CAUTION

Ensure that the brake-release lever is in the ENGAGED position before driving. There should be an audible "click" when stopping and starting.

BRAKE RELEASE LEVER - Manually engages and disengages the brake. The brake release lever is located under the shroud near the anti-tipper on the left side.

The brake must be **ENGAGED** (lever **PUSHED IN**) in normal driving conditions. Activation of the throttle control lever automatically releases the brake so that the powered scooter can drive. Releasing the throttle control lever automatically engages the brake so as to prevent the powered scooter from rolling on its own.

When the brake release lever is **DISENGAGED** (lever **PULLED OUT**) and the key is removed, the powered scooter can be pushed. The powered scooter **CANNOT** be driven with the brake in the **DISENGAGED** (lever **PULLED OUT**) position.

ONLY replace with

before resetting

1. Remove seat. Refer to **INSTALLING THE SEAT** in SECTION 4 of this manual.
2. Remove rear shroud. Refer to **REMOVING/INSTALLING THE REAR SHROUD** in SECTION 7 of this manual.

er.
assemble the



FIGURE 3 -
BR

FUSE REPLACEMENT (FIGURE 4)

1. Remove seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.
2. Remove rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in SECTION 7 of this manual.

NOTE: Two (2) fuse holders are located on the wiring harness.

NOTE: Replace EXISTING blown fuse with a NEW fuse of the same rating.

3. Pull fuse out and install NEW fuse.
4. Reverse STEPS 1-4 to reassemble the powered scooter.

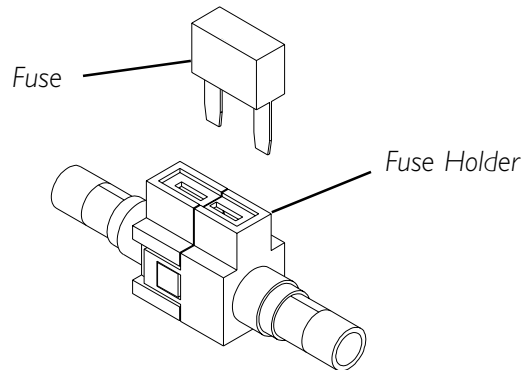
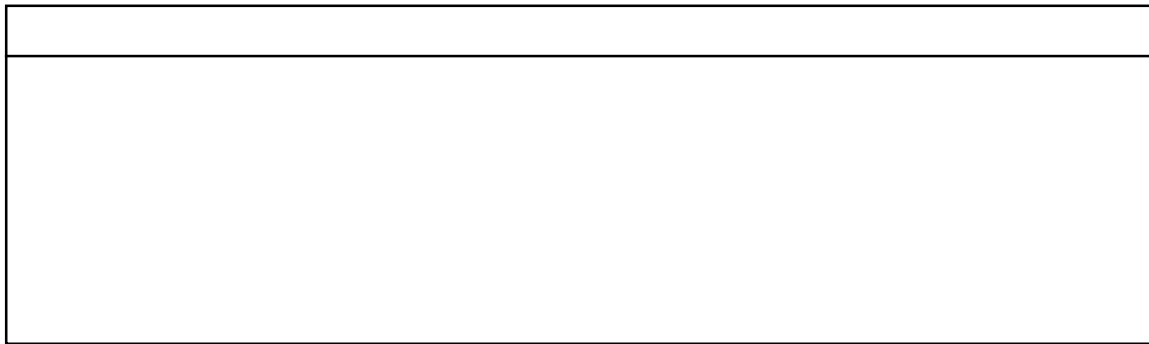


FIGURE 4 - FUSE REPLACEMENT

**WARNING**

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise injury or damage may result.

Before performing any maintenance, adjustment or service, turn power OFF and remove key from ignition.

REMOVING

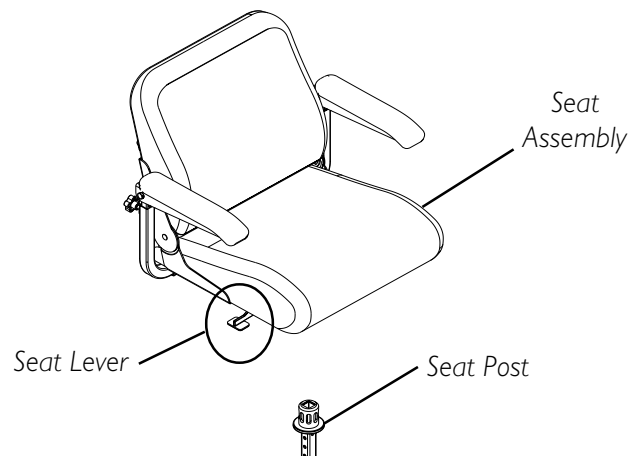
1. Fold down seat back.
2. Pulling UP on the seat lever, lift the seat assembly up and away from the seat post.

INSTALLING

1. Pulling UP on the seat lever, lower the seat assembly onto the seat post as shown in FIGURE 1.

NOTE: If necessary, slightly twist seat assembly back and forth to lock in place.

2. Release seat lever and lift up on seat assembly to ensure the seat is secure.

**FIGURE 1 - REMOVING/INSTALLING THE SEAT**

WARNING

Ensure that the seat height adjustment pin is properly engaged and locked. Otherwise, injury and/or damage may result.

NOTE: Take note of position and orientation of the seat post and seat post pin before removing.

NOTE: The seat post has three (3) height settings. If a change in seat height is desired refer to ADJUSTING SEAT HEIGHT in this section of the manual.

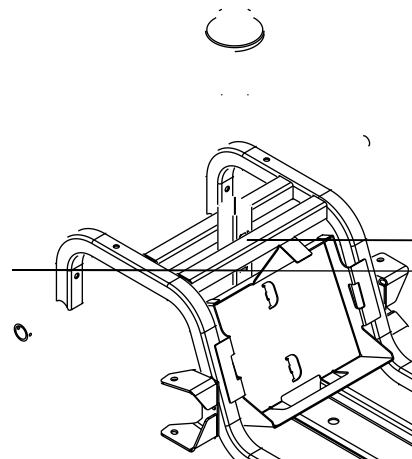
REMOVING

1. If necessary, remove the seat. Refer to REMOVING/INSTALLING THE SEAT in this section of the manual.
2. Remove the mounting screw, two washers and locknut securing the seat post to the frame post.
3. Lift seat post UP and remove from frame post.

INSTALLING

1. Insert the seat post into the frame post and align the frame post mounting hole with the desired seat post mounting hole.
2. Insert mounting screw through both frame post and seat post. Install the two washers and locknut onto mounting screw and securely tighten.
3. If necessary, install the seat. Refer to REMOVING/INSTALLING THE SEAT in this section of the manual.

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in this section of the manual.
2. Remove the mounting screw, two washers and locknut securing the seat post to the frame post.
3. Align the frame post mounting hole with one (1) of three (3) seat post mounting holes to achieve desired seat height.
4. Insert mounting screw through both frame tube and seat post. Install the two washers and locknut onto mounting screw and securely tighten.
5. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in this section of the manual.



WARNING

DO NOT adjust the seat position outside the specifications recommended by the manufacturer.

1. Remove the seat assembly from the scooter. Refer to REMOVING/INSTALLING THE SEAT ASSEMBLY in this section of the manual.
2. Remove the adjustable width arms. Refer to REMOVING/INSTALLING/ADJUSTING THE ARMRESTS in SECTION 5 of this manual.
3. Remove the six (6) mounting screws located under the seat that secure the back assembly to the seat base.
4. Adjust back assembly to one (1) of three (3) mounting positions.
5. Reinstall the six (6) mounting screws securing the back assembly to the seat base. Securely tighten.
6. Reinstall the adjustable width arms. Refer to REMOVING/INSTALLING/ADJUSTING THE ARMRESTS in SECTION 5 of this manual.
7. Reinstall the seat assembly onto the scooter. Refer to REMOVING/INSTALLING THE SEAT ASSEMBLY in this section of the manual.

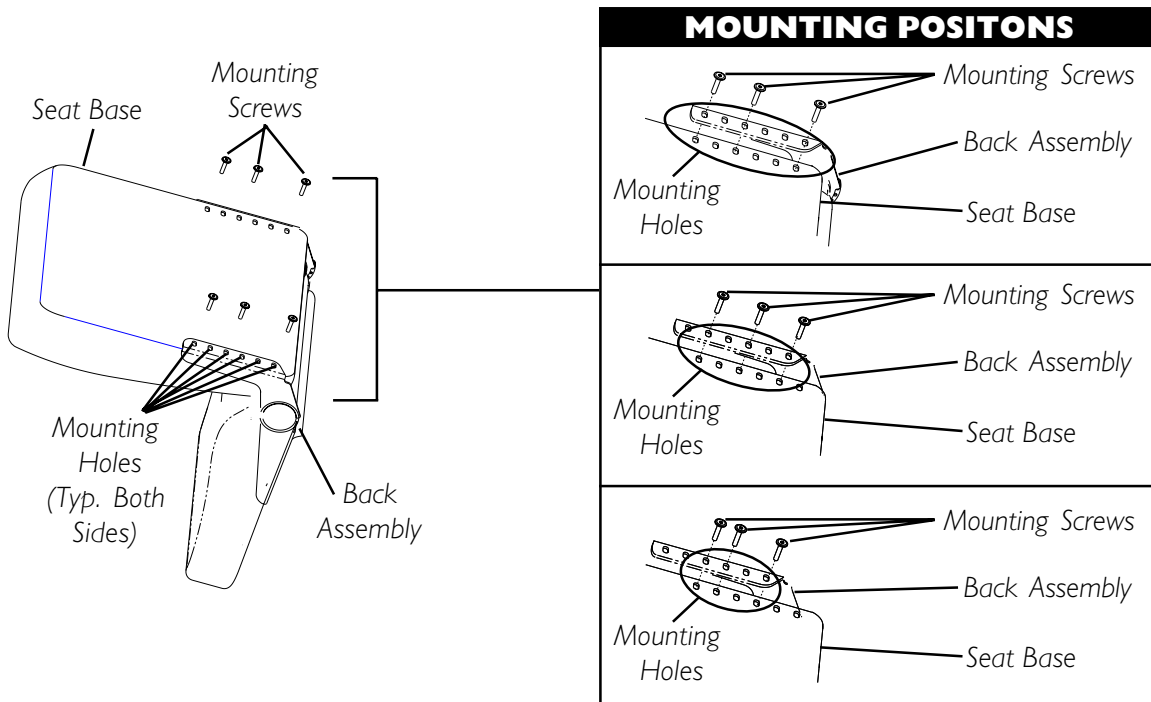


FIGURE 3 - ADJUSTING THE SEAT DEPTH

WARNING

Ensure that seat is locked into the forward position **BEFORE** and **DURING** operation of the scooter. Otherwise, injury to the user and/or damage to the scooter may result.

CAUTION

DO NOT use the seat swivel option when accessories are installed (such as safety flag, crutch/cane holder, etc.) and the seat is mounted in lowest height adjustment position. Otherwise, damage to the scooter may occur.

1. The seat lever is located just beneath the seat on the right side.
2. Pull the seat lever UP to rotate the seat.

NOTE: The seat locks in position at 90° intervals. The seat is locked when an audible click is heard.

3. Rotate the seat to the desired position.
4. Release seat lever to lock seat in desired position.

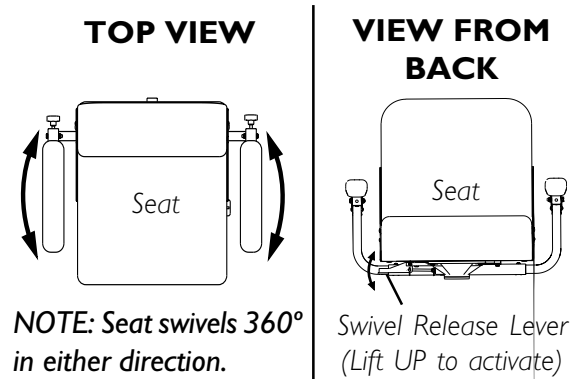


FIGURE 4 - 90° SEAT SWIVEL ADJUSTMENT

WARNING

ALWAYS wear your seat positioning strap. Inasmuch as the **SEAT POSITIONING STRAP** is an option on this powered scooter (you may order with or without the Seat Positioning Strap), Invacare strongly recommends ordering the **Seat Positioning Strap** as an additional safeguard for the powered scooter user.

1. Remove the two (2) mounting screws and washers that secure the seat positioning straps to the arm frame.
2. Remove the two (2) halves of the seat positioning strap from the arm frame.
3. Reposition the two (2) NEW seat positioning strap halves underneath arm frame.
4. Reinstall the two (2) mounting screws and washers that secure the seat positioning straps to the arm frame. Securely tighten.

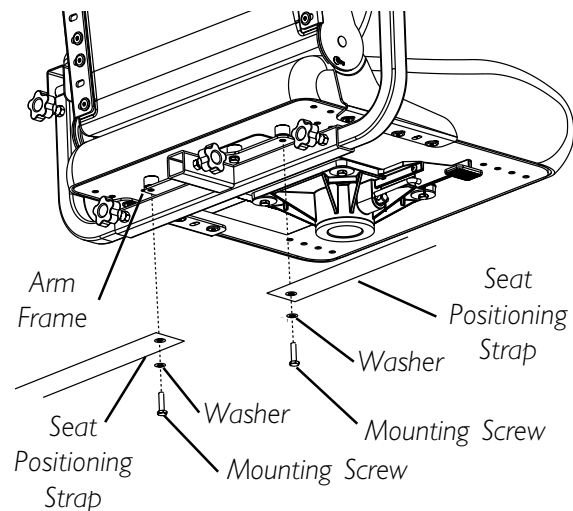


FIGURE 5 - REPLACING SEAT POSITIONING STRAP

Section 5 - Arms - includes the following:

Removing/Installing/Adjusting Armrests

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure all attaching hardware is tightened securely - otherwise injury or damage may result.

Before performing any maintenance, adjustment or service, turn power **OFF** and remove key from ignition.

REMOVING/INSTALLING/ADJUSTING THE ARMRESTS

REMOVING/INSTALLING (FIGURE 1)

NOTE: Reverse this procedure to install the armrests.

1. Loosen adjustment knob that secures the armrest to the arm support tube.
2. Remove the adjustable width arm from the arm support tube.
3. IF necessary, repeat STEPS 1-2 to remove the remaining armrest.

ADJUSTING ARMREST WIDTH (FIGURE 1)

NOTE: Changing the width of the armrests may also effect the overall width of the powered scooter. Use caution when traveling through doorways as the width may have increased.

1. Loosen the adjustment knob located either beneath the seat frame or on the back of the seat frame.

CAUTION

The armrest can be adjusted to a maximum distance of 4½ inches from the inside of the armrest to the top of the mounting shaft. If the armrest is adjusted beyond the maximum 4½ inches, the armrest will fall out.

2. Move armrest in or out to the desired position.
3. Retighten adjustment knob securely.
4. Measure distance between back and inside of armrest.

NOTE: Both armrests should be adjusted to the same distance away from the back.

5. Repeat STEPS 1-4 for opposite armrest setting armrest at distance determined in STEP 4.

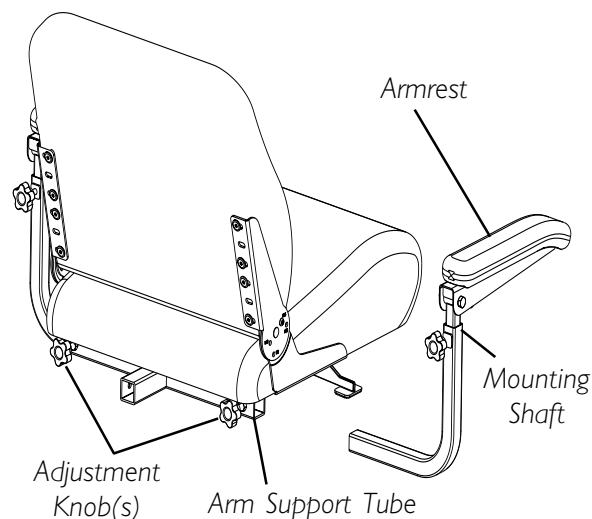
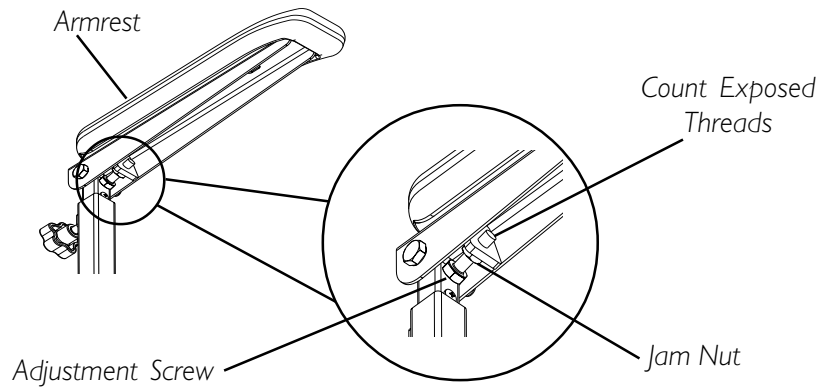


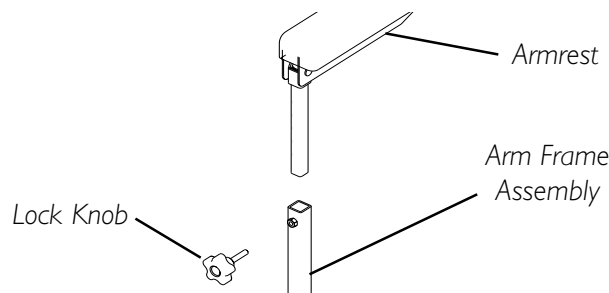
FIGURE 1 - REMOVING/INSTALLING/ADJUSTING THE ADJUSTABLE WIDTH ARMS

ADJUSTING ARMREST ANGLE (FIGURE 2)

1. Lift-up the armrest.
2. Loosen the jam nut.
3. Adjust the socket screw up or down to the desired arm angle position.
4. Tighten the jam nut.
5. To determine the same angle for the opposite armrest, count the exposed threads after the jam nut has been tightened.
6. Repeat STEPS 1-5 for opposite armrest, if necessary.

**FIGURE 2 - ADJUSTING ARMREST ANGLE****ADJUSTING ARMREST HEIGHT (FIGURE 3)**

1. Remove the lock knob that secures the armrest to the arm frame assembly.
2. Adjust the armrest to desired height.
3. Reinstall the lock knob that secures the armrest to the arm frame assembly and tighten securely.
4. Repeat STEPS 1-3 for opposite armrest, if necessary.

**FIGURE 3 - ADJUSTING ARMREST HEIGHT**

Section 6 - Tiller Adjustment - includes the following:

Tiller Angle Adjustment

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise injury or damage may result.

Before performing any maintenance, adjustment or service, turn power OFF and remove key from ignition.

TILLER ANGLE ADJUSTMENT (FIGURE 1)

WARNING

Ensure that tiller is properly adjusted before driving the scooter.

After making ANY tiller angle adjustments and BEFORE use, the tiller MUST be securely locked into position. Otherwise, a fall from the scooter could occur causing bodily injury and/or damage to the scooter. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the adjustment plate.

NOTE: The powered scooters feature an adjustable tiller. The tiller locks into a position that is most comfortable for you. It also lets you fold down the tiller for transportation and storage.

1. Pull UP on the tiller release lever located under the RIGHT tiller handle.
2. Push/pull the tiller to the desired angle and release the tiller lever.
3. Gently, push/pull against tiller to ensure that the tiller is securely engaged into the locking mechanism.

NOTE: The tiller is locked in position when an audible "click" is heard.

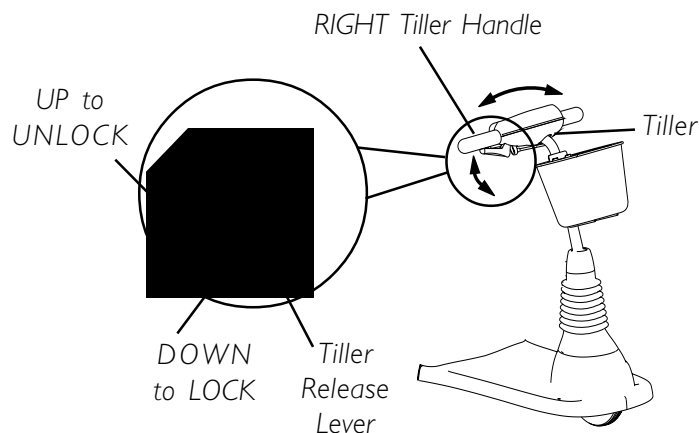


FIGURE 1 - TILLER ANGLE ADJUSTMENT

Section 7 - Shroud/Wheels - includes the following:

Removing/Installing the Rear Shroud

Replacing Foam Filled Tires Onto Wheel Rims

Removing/Installing the Drive Wheels

Removing/Installing the Front Wheel

Removing/Installing the Caster Assemblies

WARNING

After **ANY** adjustments, repair or service and **BEFORE** use, make sure that all attaching hardware is tightened securely - otherwise injury or damage may result.

Before performing any maintenance, adjustment or service, turn power **OFF** and remove key from ignition.

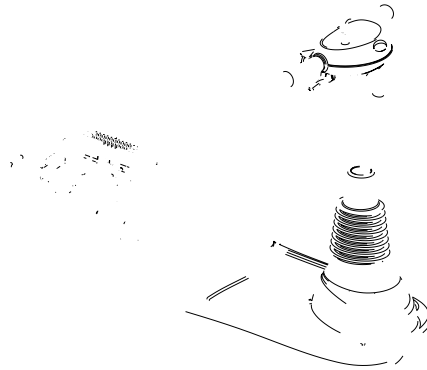
REMOVING/INSTALLING THE REAR SHROUD (FIGURE 1)

REMOVING

1. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.
2. Lift the rear shroud off of the frame post.

INSTALLING

1. Align three (3) tabs on the rear shroud with the three (3) slots (not shown in figure) in the front shroud.
2. Place rear shroud on the frame and press down slightly.
3. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.



REPLACING FOAM FILLED TIRES ONTO WHEEL RIMS

WARNING

This procedure **MUST** be performed by a qualified technician.

NOTE: During initial use of scooter, user may experience a flat spot on wheels. Flat spot will vanish with continuous use of scooter.

REMOVING/INSTALLING THE DRIVE WHEELS (FIGURE 2)

REMOVING

WARNING

Before performing any maintenance, adjustment or service, turn power OFF and remove key from ignition.

1. Turn power OFF and remove the key from the ignition.
2. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in this section of the manual.
3. Place the sub-frame up on blocks so that the drive wheels are OFF the ground.
4. Remove the hex nut and washer that secures the drive wheel to the drive shaft.
5. Use a wheel puller if necessary to remove the EXISTING drive wheel assembly from the drive shaft.
6. Remove keystick from drive shaft. Set aside.
7. If necessary, repeat STEPS 1-5 to remove other drive wheel.

INSTALLING

1. Place keystick in cutout on drive shaft as shown in FIGURE 2.

NOTE: The keystick in the drive shaft MUST lineup with the cutout in the wheel hub.

NOTE: If necessary, use a rubber hammer to gently tap drive wheel completely into position on the drive shaft.

2. Install the drive wheel onto the drive shaft.
3. Secure wheel to drive shaft using a washer and hex nut. Securely tighten.
4. Repeat STEPS 1-5 to install the other drive wheel.
5. Install the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in this section of manual.
6. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.

**FIGURE 2 - REMOVING/INSTALLING
THE DRIVE WHEELS**

REMOVING/INSTALLING THE FRONT WHEEL (FIGURE 3)

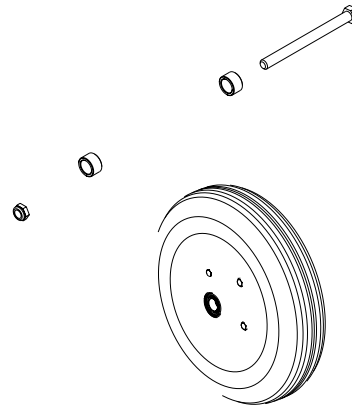
WARNING

Before performing any maintenance, adjustment or service, turn power OFF and remove key from ignition.

NOTE: Take note of position and orientation of wheel and mounting hardware before removing.

REMOVING

1. Turn power OFF and remove the key from the ignition.
2. Place the front of the powered scooter up on blocks so that the front wheel is OFF the ground.
3. Remove the mounting screw, locknut and two (2) spacers that secure the front wheel to the fork.
4. Remove front wheel from fork.



INSTALLING

WARNING

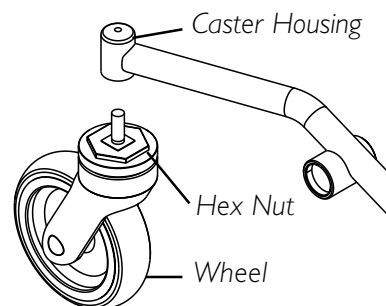
Front wheel **MUST** be mounted in the bottom fork mounting hole - otherwise, injury may result.

1. Align wheel with the fork mounting holes as shown in FIGURE 3.
2. Using the mounting screw, locknut and two (2) spacers that secure the front wheel to the fork
3. Securely tighten front wheel mounting hardware.

REMOVING/INSTALLING THE CASTER ASSEMBLIES (FIGURE 4)

REMOVING

1. Apply a wrench to the hex nut on the caster assembly.
2. Turn the hex nut COUNTER-CLOCKWISE to loosen and remove the caster wheel.
3. If necessary, repeat STEPS 1-2 to remove the other caster.



**FIGURE 4 - REMOVING/
INSTALLING THE CASTER
ASSEMBLY**

INSTALLING

1. Insert the new caster wheel into the caster housing and turn the hex nut CLOCKWISE to securely tighten the caster wheel in place.

Section 8 - Batteries - includes the following:

Recommended Battery Types

Replacing the Batteries

Charging the Batteries

Battery Charger Operation

WARNING

Before performing any maintenance, adjustment or service, turn power OFF and remove key from ignition.

NEVER allow any of your tools and/or battery cable(s) to contact **BOTH** battery terminal(s)/post(s) at the same time. An electrical short may occur and serious personal injury or damage may occur.

The use of rubber gloves and chemical goggles and face shield is recommended when working with batteries.

Always use a battery lifting strap when lifting a battery. It is the most convenient method and assures that the battery acid will not spill. It also helps to prolong the life of the battery.

DO NOT tip the batteries. Keep the batteries in an upright position.

Invacare strongly recommends that battery installation and battery replacement always be done by a qualified technician.

After **ANY** adjustments, repair or service and **BEFORE** use, make sure all attaching hardware is tightened securely - otherwise injury or damage may result.

CAUTION

When connecting the battery cables to the battery(ies), the battery cable(s) MUST be connected to the battery terminal(s)/post(s) as shown in FIGURE 2, otherwise damage to the battery may result.

For proper battery connection batteries MUST use post style terminals with mounting holes through the terminal.

NOTE: If there is battery acid on the rear frame or on the sides of the batteries, apply baking soda to these areas to neutralize the battery acid. Before reinstalling the NEW or existing battery(ies), clean the baking soda from the battery tray or battery(ies).

RECOMMENDED BATTERY TYPE (FIGURE 1)

WARNING

The warranty and performance specifications contained in this manual are based on the use of deep cycle gel cell or sealed lead acid batteries. Invacare strongly recommends their use as the power source for this unit.

CAUTION

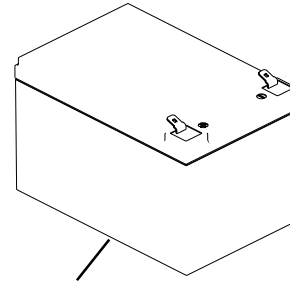
Failure to use the correct battery size and/or voltage may cause damage to the powered scooter and give unsatisfactory performance.

The powered scooter uses two (2) 12 volt, 12 Amp-hour (12AH) batteries.

NOTE: Recommended battery type is spill proof and requires no maintenance except routine charging.

NOTE: Charge batteries daily. It is critical not to let them run low at any time.

NOTE: Invacare recommends that both batteries be replaced if one (1) battery is defective.



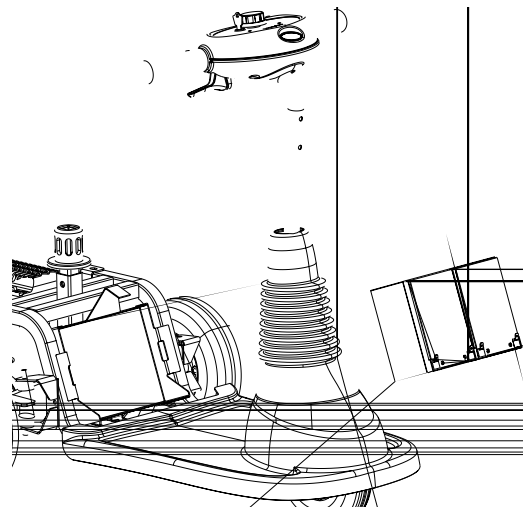
12 Volt, 12 AMP Hour Batteries.

FIGURE 1 - RECOMMENDED BATTERY TYPE

REPLACING THE BATTERIES (FIGURE 2)

NOTE: When replacing or installing batteries, ensure that the battery harness connectors completely grip the terminals of the battery. Connection should be tight and secure. Pliers can be used to gently crimp the contact to strengthen the connection.

1. Place the powered scooter in a well ventilated area where work can be performed without risking damage to carpeting or floor covering.
2. Turn power OFF and remove the key from the ignition.
3. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in SECTION 7 of this manual.
4. Pull the hook and loop fastening battery strap apart.
5. Disconnect the red and black battery connector from the wiring harness assembly (DETAIL "A" of FIGURE 2).
6. Disconnect the wiring harness from the batteries by holding the connectors and pulling them in the following order (DETAIL "B" of FIGURE 2):
 - A. NEGATIVE (-) BLACK battery cable from the NEGATIVE (-) battery terminal/post on the LEFT battery.
 - B. POSITIVE (+) RED battery cable to POSITIVE (+) battery terminal/post on the RIGHT battery.
 - C. WHITE BATTERY CABLE (JUMPER) from the POSITIVE (+) battery terminal/post on the LEFT battery and the NEGATIVE (-) battery terminal/post on the RIGHT battery.



NOTE: Seat and shroud not shown for clarity

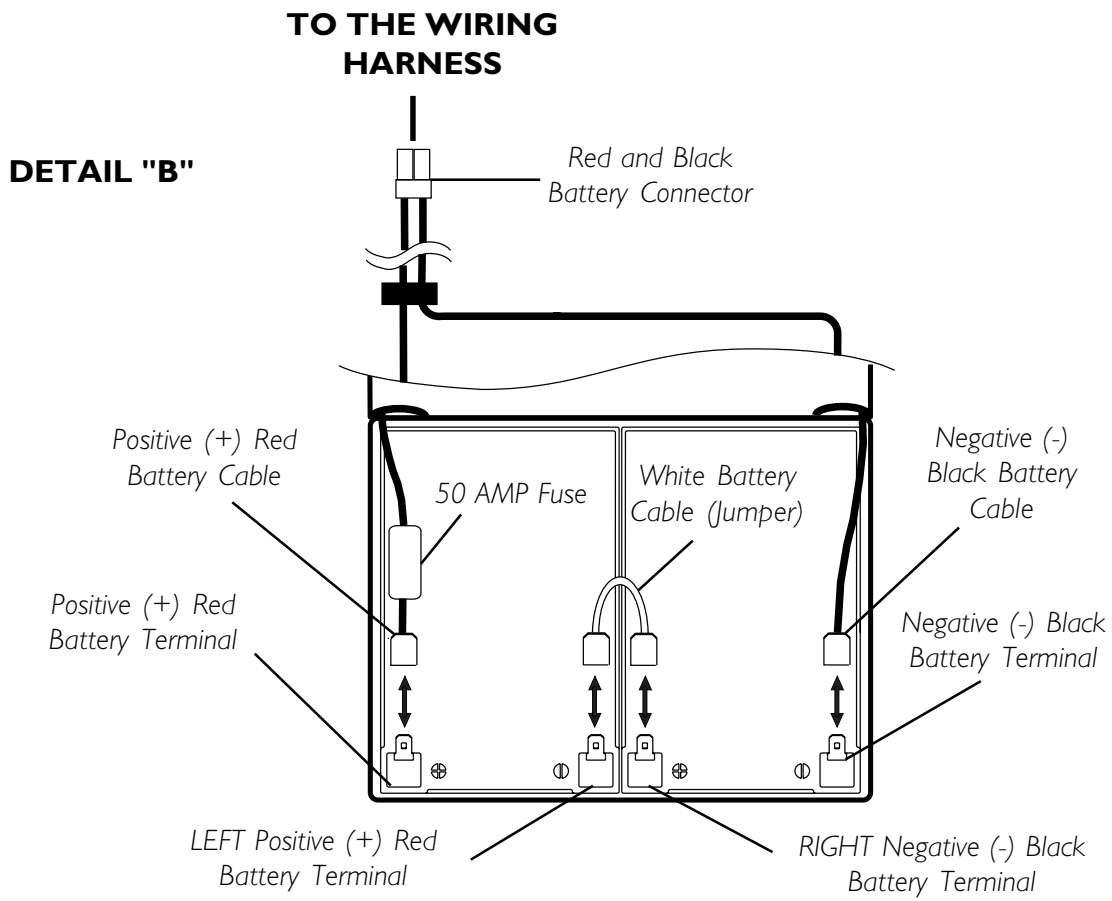


FIGURE 2- REPLACING THE BATTERIES

7. Remove the EXISTING batteries from battery tray by lifting the batteries out in the direction shown in DETAIL "A" of FIGURE 2.
 8. Install two (2) NEW batteries into the battery tray.
 9. Connect the wiring harness to the NEW batteries in the following order (DETAIL "B" of FIGURE 2):
 - A. NEGATIVE (-) BLACK battery cable from the NEGATIVE (-) battery terminal/post on the LEFT battery.
 - B. POSITIVE (+) RED battery cable to POSITIVE (+) battery terminal/post on the RIGHT battery.
 - C. WHITE BATTERY CABLE (JUMPER) from the POSITIVE (+) battery terminal/post on the LEFT battery and the NEGATIVE (-) battery terminal/post on the RIGHT battery.
 10. Connect the red and black battery connector to the wiring harness assembly. Tighten securely.
 11. Secure the batteries in the battery tray using the battery strap (DETAIL "A" of FIGURE 2).
 12. Reinstall the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in SECTION 7 of this manual.
 13. Reinstall the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.
- NOTE: New battery(ies) MUST be fully charged BEFORE using, otherwise the life of the battery(ies) will be reduced.*
14. If necessary, charge the battery(ies). Refer to CHARGING BATTERIES in this section of the manual.

CHARGING THE BATTERIES

WARNING

Never attempt to recharge the batteries by attaching cables directly to the battery terminals or clamps.

DO NOT attempt to recharge the batteries and operate the powered scooter at the same time.

CAUTION

New batteries **MUST** be fully charged prior to initial use of the powered scooter.

Always charge new batteries before initial use or battery life will be reduced.

As a general rule, you should recharge your batteries as frequently as possible to assure the longest possible life and to minimize required charging time. Plan to recharge them when you do not anticipate using the powered scooter.

The range per battery charge using recommended batteries should be approximately five (5) to nine (9) hours of typical operation. Extensive use on inclines may substantially reduce per charge mileage.

WARNING

NEVER leave the charger unattended if the circuit breaker or charger trips repeatedly - **IMMEDIATELY** unplug charger and contact dealer or a qualified technician.

ON-BOARD BATTERY CHARGER (FIGURE 3)

NOTE: The powered scooter is designed with an electrical lockout to prevent it from being driven while the charger is plugged into an outlet.

1. Plug AC power cord into on-board battery charger port located on the rear bumper.
2. Plug AC power cord into 110-volt wall outlet.
3. Refer to **BATTERY CHARGER OPERATION** in this section of the manual.

AC Power Cord

Rear Shroud

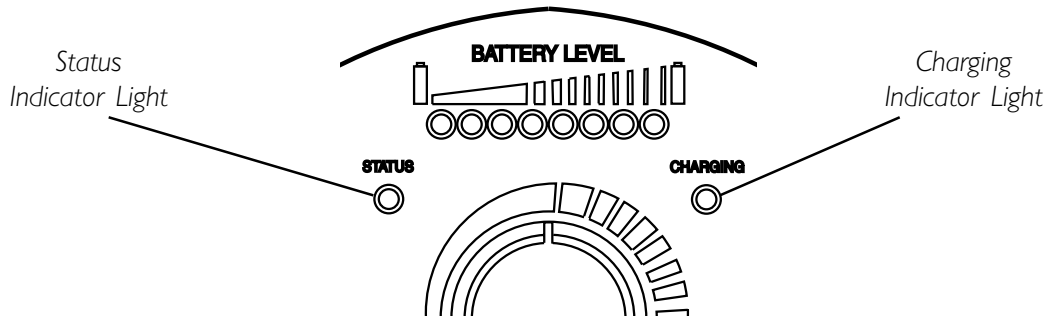
**FIGURE 3 - CHARGING THE BATTERIES
(ON-BOARD BATTERY CHARGER)**

BATTERY CHARGER OPERATION (FIGURE 4)

Charger Indicator Light - Tiller.

NOTE: If the scooter is turned on while charging, the battery charge indicator will show the batteries at FULL charge. The charger must be unplugged and the powered scooter must be ON to show actual battery charge level.

1. The charging indicator will illuminate SOLID RED indicating that the charger is ON.
2. If the charger is plugged in and the charger indicator is OFF, the charger is disconnected. Check that all connections are secure. If CHARGE LED indicator is still OFF, unplug AC power cord from the on-board battery charger and wall outlet. Contact dealer or a qualified technician.



STATUS INDICATOR		STATUS	
SOLID GREEN		NORMAL	
"BLINKING" GREEN		REFER TO STATUS INDICATOR TABLE UNDER <u>CONTROL PANEL FEATURES</u> IN SECTION 3 OF THIS MANUAL	
CHARGING INDICATOR		STATUS	
SOLID RED		CHARGER PLUGGED IN	
LED "OFF"		NOT CHARGING	

FIGURE 4 - BATTERY CHARGER OPERATION

Section 9 - Transporting - includes the following:

Transporting the Scooter

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely; otherwise serious injury or damage may result.

TRANSPORTING THE SCOOTER (FIGURE 1)

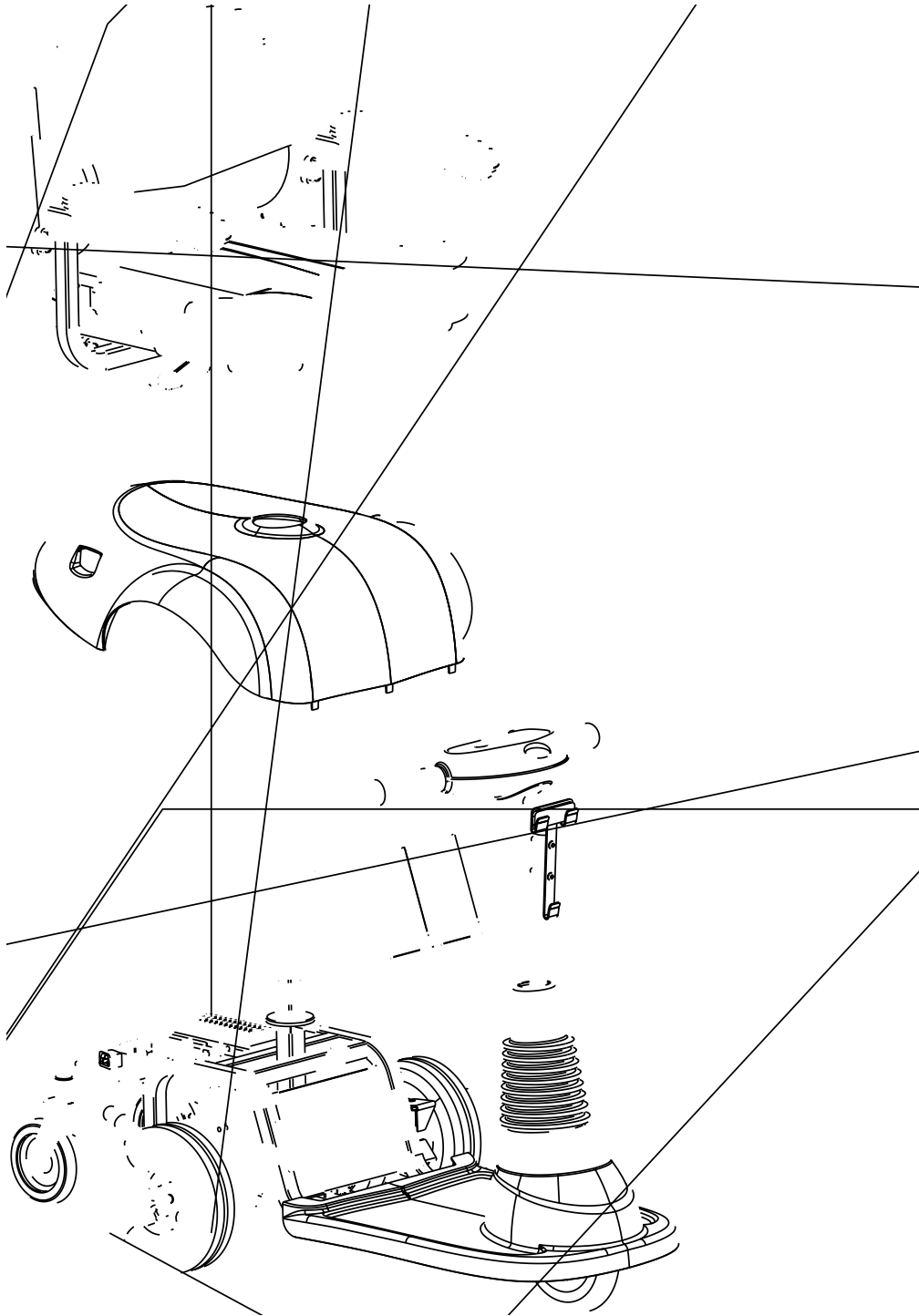
DISASSEMBLING

1. If installed on scooter, remove the front basket. Refer to REMOVING/INSTALLING THE FRONT BASKET in SECTION 10 of this manual.
2. Remove the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.
3. Remove the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in SECTION 7 of the manual.
4. Remove the batteries. Refer to REPLACING THE BATTERIES in SECTION 8 of this manual.
5. Fold tiller down to lowest locked position. Refer to TILLER ANGLE ADJUSTMENT in SECTION 6 of this manual.

ASSEMBLING

1. Unfold tiller. Refer to TILLER ANGLE ADJUSTMENT in SECTION 6 of this manual.
2. Install the batteries. Refer to REPLACING THE BATTERIES in SECTION 8 of this manual.
3. Install the rear shroud. Refer to REMOVING/INSTALLING THE REAR SHROUD in SECTION 7 of the manual.
4. Install the seat. Refer to REMOVING/INSTALLING THE SEAT in SECTION 4 of this manual.
5. If desired, install the front basket. Refer to REMOVING/INSTALLING THE FRONT BASKET in SECTION 10 of this manual.

TRANSPORTING



<p>Section 10 - Options - includes the following:</p> <p><i>Installing/Removing the Front Basket</i></p> <p><i>Installing/Removing the Crutch/Cane Holder</i></p> <p><i>Installing/Removing the Safety Flag</i></p> <p><i>Installing/Removing the Walker Holder</i></p> <p><i>Installing/Removing the Rear Mounted Basket</i></p>
--

WARNING

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely - otherwise, injury or damage may result.

The front basket and the floor basket are both rated for a maximum loading capacity of 10 lbs.

REMOVING/INSTALLING THE FRONT BASKET (FIGURE 1)

1. To remove, lift up on basket and remove from mounting clips.
2. To install:
 - A. Align slots of basket with mounting clips on tiller shroud.
 - B. Push down on basket to secure in place.

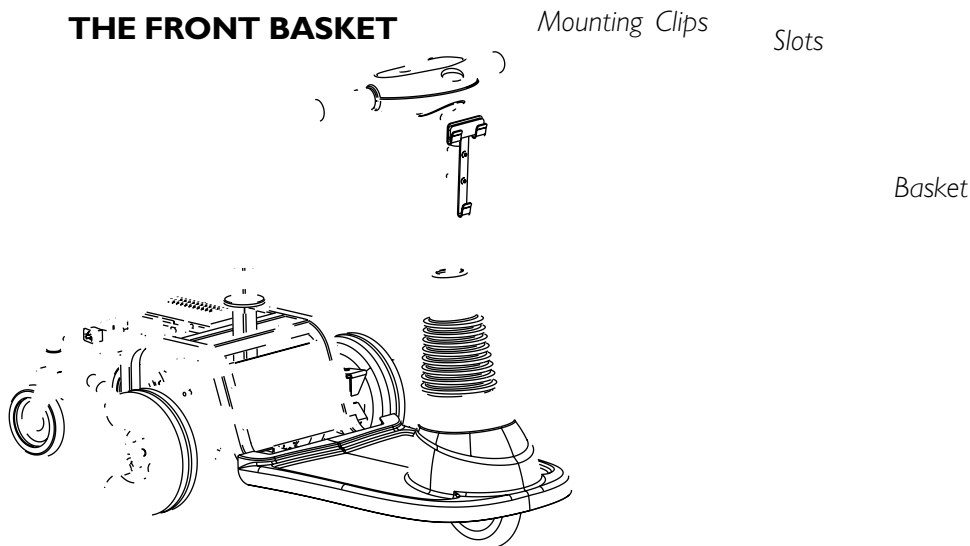


FIGURE 1 - REMOVING/INSTALLING

INSTALLING/REMOVING THE CRUTCH/CANE HOLDER HOLDER (FIGURE 2)

NOTE: The Crutch/Cane Holder, Safety Flag, and Oxygen Holder all install into the accessory tube; ONLY one (1) of these may be installed at a time.

NOTE: To remove, reverse the following procedure.

WARNING

The installation of the crutch/cane holder onto the back of the scooter seat significantly increases the length of the scooter. When turning the scooter or swiveling the scooter seat, it is important to take note of this increased length - otherwise, injury and/or damage to the surrounding property may result.

1. Install the crutch/cane holder into the accessory tube located on the back of the seat.
2. Install mounting knob to secure the crutch/cane holder in place. Securely tighten.
3. Align slot on base with hook on crutch/cane holder and slide base down into position.

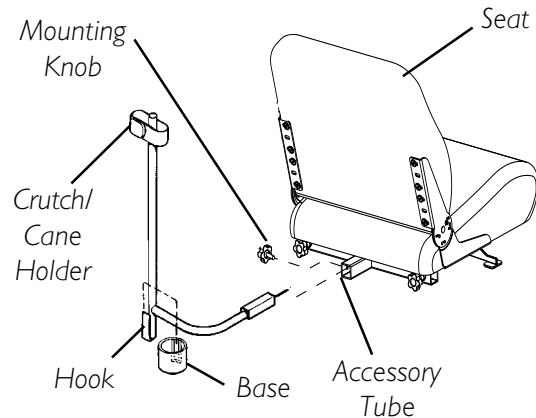


FIGURE 2 - REMOVING/INSTALLING THE CRUTCH/CANE HOLDER

INSTALLING/REMOVING THE SAFETY FLAG (FIGURE 3)

NOTE: To remove, reverse the following procedure.

WARNING

The installation of the safety flag onto the back of the scooter seat significantly increases the length of the scooter. When turning the scooter or swiveling the scooter seat, it is important to take note of this increased length - otherwise, injury and/or damage to the surrounding property may result.

INSTALLING

1. Install the bracket into the accessory tube located on the back of the seat.
2. Install mounting knob to secure the bracket in place. Securely tighten.
3. Install safety flag into bracket.

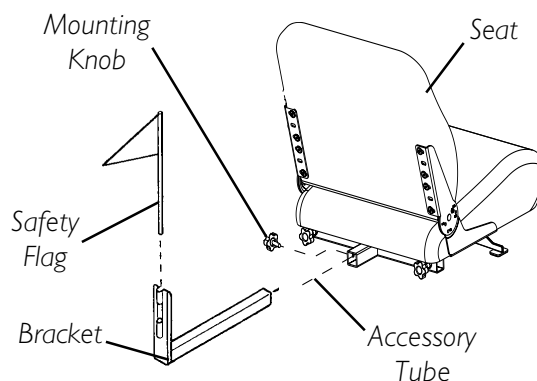


FIGURE 3 - REMOVING/INSTALLING THE SAFETY FLAG

INSTALLING/REMOVING/USING THE WALKER HOLDER HOLDER

INSTALLATION WARNINGS

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely.

The installation of the walker holder onto the back of the wheelchair seat increases the length of the wheelchair up to nine (9) inches. When turning the wheelchair it is important to take note of this increased length - otherwise, injury and/or damage to surrounding property may result.

INSTALLING/REMOVING THE WALKER HOLDER (FIGURE 4)

NOTE: Reverse this procedure to remove the walker holder.

1. If necessary, loosen but do not remove the mounting knob.
2. Install the walker holder into the accessory tube.
3. Thread the mounting knob into the welded nut on the accessory tube. Securely tighten.

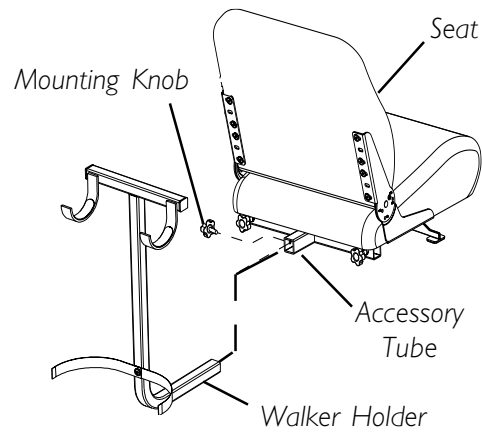


FIGURE 4 - INSTALLING/ REMOVING THE WALKER HOLDER

USING THE WALKER HOLDER (FIGURE 5)

1. Fold walker. Refer to walker instructions.

NOTE: Walker MUST be folded before using walker holder.

2. Hang folded walker on walker holder hooks.
3. Secure walker with hook and loop straps.

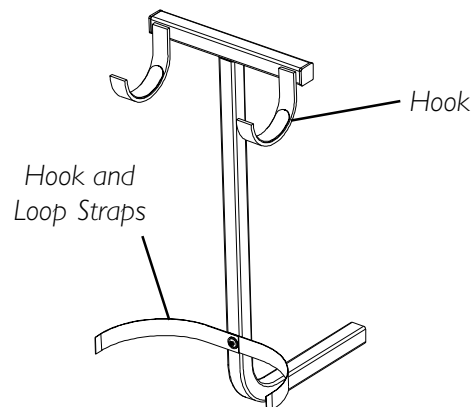


FIGURE 5 - USING THE WALKER HOLDER

INSTALLING/REMOVING THE REAR MOUNTED BASKET (FIGURE 6)

NOTE: To remove, reverse the following procedure.

WARNING

The rear mounted basket is rated for a maximum capacity of ten (10) lbs.

After ANY adjustments, repair or service and BEFORE use, make sure that all attaching hardware is tightened securely.

The installation of the basket and basket bracket onto the back of the scooter seat increases the length of the scooter up to nine (9) inches.

When turning the scooter or swiveling the scooter seat, it is important to take note of this increased length - otherwise, injury and/or damage to surrounding property may occur.

1. If necessary, loosen but do not remove the mounting knob.
2. Install the basket bracket into the accessory tube.
3. Thread the mounting knob into the welded nut on the accessory tube. Securely tighten.
4. Align mounting clips on bracket with slots on basket and slide basket down securely into position.

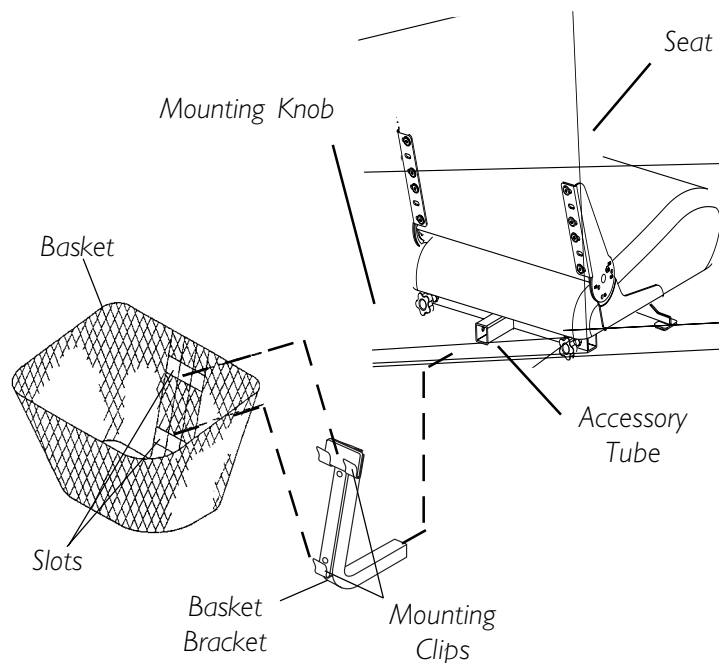


FIGURE 6 - INSTALLING THE REAR MOUNTED BASKET

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants this product to be free from defects in materials and workmanship for a period of eighteen (18) months on electrical and transaxle and three (3) years on frame from date of purchase. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced at Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address on the back cover, provide dealer's name, address, date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECT TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT INVACARE'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THESE INSTRUCTIONS.

THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN, THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.



Yes, you can.™

Invacare Corporation www.invacare.com

USA

One Invacare Way
Elyria, Ohio USA
44035-4190
800-333-6900

Canada

570 Matheson Blvd E.
Unit 8 Mississauga, Ontario
L4Z 4G4, Canada
800-668-5324

Invacare is a registered trademark
of Invacare Corporation.
Teflon is a registered trade mark of
E.I. Du Pont Nemours and Company.
Yes, You can. is a trademark of
Invacare Corporation.

© 2003 Invacare Corporation
Part No. 1118395 Rev B - 10/03